

ABSTRACT

Pulse encoders (21) are linked to motors (16) in driven travel support devices positioned in the opposite outside portions of a movable rack travel path (trackless) in a transverse direction to the travel path, and a movable rack controller (41) is provided for controlling drive rotation amounts of the motors (16), based on pulse signals from pulse encoders (21). That controller (41) finds travel distances of the driven travel support devices by counting the pulses from the pulse encoders (21), and, when a difference occurs in pulse counts, the controller finds predicted travel distances for the driven travel support devices expected in a certain period of time, based on the travel distances, and performs a movable rack deviation (inclination) correcting control to control speeds (drive rotation amounts) of the motors (16) to eliminate a deviation between the predicted travel distances. The movable rack system thus provided allows a vehicle to travel through a work corridor in one direction, and a group of movable racks to travel in a perpendicular attitude relative to a travel path.